



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

DEC 11 2003

DOT-E 13229
(FIRST REVISION)

EXPIRATION DATE: August 31, 2005

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Matheson Tri-Gas Incorporated
East Rutherford, NJ

(See Appendix A to this document for a list of additional grantees)

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce for export only of phosphine certain DOT specification and non-DOT specification cylinders. This exemption provides no relief from any Hazardous Materials Regulation (HMR) other than as specifically stated herein.

b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use or other uses not associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 173.192(a) and 173.304a(b) in that non-DOT specification cylinders are not authorized except as specified herein; and §§ 173.301(l) and 173.304(b) in that cylinders may be liquid full at temperatures below 130°F.
5. BASIS: This exemption is based on the application of Matheson Tri-Gas Incorporated dated April 28, 2003 and supplemental information dated April 30, June 10 and July 28, 2003, submitted in accordance with § 107.105 and the public proceeding thereon.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Phosphine	2.3	UN2199	N/A Zone A

7. SAFETY CONTROL MEASURES:a. PACKAGING - Packagings prescribed are:

(1) DOT specification 3A, 3AA and 3AL cylinders with a minimum marked service pressure of 2180 psig (150 bar).

(2) Non-DOT specification seamless aluminum cylinders with a marked test pressure of 300 bar (4,500 psig) manufactured by Luxfer Gas Cylinders (Nottingham, England). Cylinders must be in conformance with Luxfer Gas Cylinders drawing numbers NM20EEC, NM40EEC, NM50EEC and P2802Z on file with the Office of Hazardous Materials Exemptions and Approvals. The cylinders must be tested and re-qualified by an ultrasonic examination (UE) method described in latest revision of ISO 6406.

b. OPERATIONAL CONTROLS -

(1) The maximum permitted fill density is 45 percent. Fill density is defined as the percent ratio of the weight of the gas in a cylinder to the weight of the water that the cylinder will hold at 60°F.

(2) The pressure in the cylinder may not exceed 95 percent of the cylinders test pressure at 65°C (149°F).

(3) The critical temperature (T_c) of phosphine must be above 15°C (59°F) and below 65°C (149°F).

(4) Pressure relief devices are prohibited.

(5) Transportation by motor vehicle is limited to private carriage or contract carriage under the exclusive use of the shipper.

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(6) The shipping paper must identify the cylinders with the exemption number "DOT-E 13229" and must carry the following certification: "This cylinder has [These cylinders have] been retested and refilled in accordance with DOT requirements for export."

(7) Emergency response information provided with the shipment and available via an emergency response telephone number must indicate that the cylinders are not fitted with pressure relief devices and provide appropriate guidance for exposure to fire.

8. SPECIAL PROVISIONS:

a. A current copy of this exemption must be maintained at each facility where the package is offered for transportation.

b. The transportation of the packages authorized under this exemption is limited to export only. Shipments to domestic destinations are not authorized.

c. Each cylinder must be plainly and durably marked "DOT-E 13229" as specified in § 172.301(c). In addition, each cylinder must be marked "For Export Only".

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo vessel.

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this exemption.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.

o Registration required by § 107.601 et seq., when applicable.

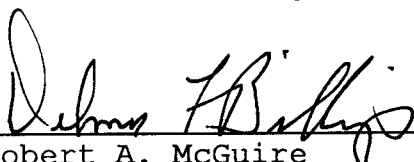
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Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when this exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:



Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

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(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Research and Special Programs Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

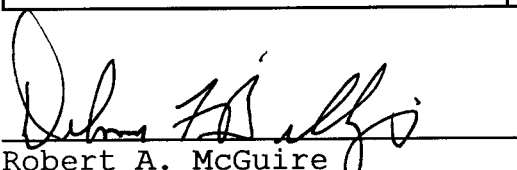
Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at <http://hazmat.dot.gov/exemptions> Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: MMToughiry/sln

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The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with § 107.107 or § 107.109, as appropriate:

Company Name City/State	Application Date	Issue Date	Expiration Date
Air Products and Chemicals, Inc. Allentown, PA	Dec 3, 2003	DEC 11 2003	Aug 30, 2005

for 
Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety